Occupational Injuries and Illnesses and Work-related Fatalities Technical Note

The series covers two separate programs of the Bureau of Labor Statistics—the annual Survey of Occupational Injuries and Illnesses (SOII) and the Census of Fatal Occupational Injuries (CFOI). Data from both programs are used by employers, workers, and safety and health specialists in efforts to prevent job-related injuries and illnesses and lessen the severity of those that do occur.

The SOII, in cooperation with State agencies, gathers information from employers on the number of nonfatal work-related injuries and illnesses. Each year the survey provides estimates by industry and by State of the number and incidence of workplace injuries and illnesses, and the number of injuries and illnesses that involve lost work time. The median number of days away from work and the percent distribution of days away from work by industry are also given.

For workers with injuries and illnesses involving time away from work, the survey estimates the number and percent distribution by occupation, sex, age, race, Hispanic origin, and length of service. Numbers, percent distributions, and incidence rates are also calculated by detailed nature of injury and illness, part of body affected, source of the injury or illness, and type of event or exposure leading to the incident. Cross tabulations of the worker characteristics and injury/illness circumstances are also available. The median and percent distribution of days away from work are estimated for each worker and case characteristic.

Additional information can be obtained from the annual bulletin: *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics*.

The CFOI collects a systematic, verifiable count of all

fatal work injuries as well as detailed information on how these events occurred. Because studies have shown that no single source captures all worker deaths, multiple data sources are used to identify, verify, and profile fatal work injuries. Death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration (OSHA) fatality reports, news media, coroner, medical examiner, and autopsy reports, State motor vehicle fatality reports, and follow-up questionnaires are among the major sources used to compile the Federal Government's most complete count of job-related fatalities.

Information such as type of incident and machinery or equipment involved; nature of injury and part of body affected; occupation, age, race, and sex of the worker; and industry of the employer is collected for each fatal injury.

Summary tables are released approximately 8 months after the end of the reference year. Profiles of fatalities occurring to specific groups of workers, or for specific types of events, or for those involving certain types of equipment or machinery are also possible.

Additional information

For more detailed information on these programs, contact the Office of Safety, Health, and Working Conditions, Bureau of Labor Statistics, 2 Massachusetts Ave. NE, Room 3180, Washington, DC 20212.

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TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases, 1997

Characteristic	All occu- pations	Truckdrivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Total number of cases	1,833,380	145,536	106,887	91,267	45,770
Percent of total by characteristic—					
Gender					
Men	65.9	92.2	85.4	9.7	70.7
Women	33.0	7.5	13.9	90.1	28.6
Age 14 - 15	(²) 3.3 11.3 29.1 28.2	- .6 6.0 29.4 30.9	- 4.7 15.8 34.1 24.1	2.8 12.5 29.6 27.4	- 2.2 7.4 27.0 27.4
45 - 54	17.1	21.2	13.5	17.5	20.3
55 - 64	7.3	9.1	4.4	7.2	10.8
65 and over	1.2	1.1	.8	1.5	2.6
Length of service with employer Less than 3 months 3 - 11 months 1 - 5 years More than 5 years Not reported	12.9 17.9 31.7 26.2 11.3	10.8 17.5 30.9 26.7 14.1	18.5 20.9 29.4 19.0 12.1	12.2 20.9 37.3 20.3 9.3	14.6 19.6 31.1 24.9 9.8
Race or ethnic origin White, non-Hispanic Black, non-Hispanic Hispanic Asian or Pacific Islander American Indian or Alaskan Native Not reported	52.7 8.9 10.2 1.7 .4 26.0	56.3 7.4 6.3 .9 .2 29.0	49.2 11.3 11.5 1.4 .4 26.1	48.2 21.4 7.6 1.5 .2 21.1	40.8 14.5 20.0 1.3 .3 23.1
Major industry division Agriculture, forestry, and fishing ³ Mining ⁴ Construction Manufacturing Transportation and public utilities ⁴ Wholesale trade Retail trade Finance, insurance, and real estate Services	2.2 1.0 10.4 24.3 12.0 7.5 17.1 2.3 23.1	.7 .5 4.1 8.3 53.4 16.6 10.7 .3 5.4	.8 1.8 - 33.7 8.8 26.4 15.8 1.3 11.5	- - (²) - - - - .4 99.6	.6 (²) 1.2 16.7 2.6 2.5 13.7 13.4 49.2
Number of days away from work 1	16.6 13.0 20.4 13.1 11.7 6.7 18.5	11.8 10.0 19.6 12.9 13.1 7.9 24.7	19.6 13.3 20.8 12.1 11.8 6.0 16.4	16.1 15.7 23.1 14.3 11.2 5.8 13.8	16.7 13.2 22.6 11.7 13.2 5.0 17.6

TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases, 1997 — Continued

Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Stock handlers and baggers	Welders and cutters
Total number of cases	45,761	44,328	37,091	31,520	29,180	28,389
Percent of total by characteristic—						
Gender						
Men	96.4	62.9	97.7	51.6	63.7	95.1
Women	2.9	36.3	1.8	47.7	32.2	3.8
Age						
14 - 15	_	_	_	.3	_	_
16 - 19	4.8	2.5	1.9	9.6	12.8	1.5
20 - 24	18.6	10.8	9.5	11.4	17.3	11.1
25 - 34	36.2	31.8	35.9	27.8	27.6	34.2
35 - 44	25.9	29.0	32.1	26.0	20.8	30.2
45 - 54	9.2	17.4	12.3	12.3	10.2	15.2
55 - 64	3.2	6.3	5.0	8.2	4.5	6.7
65 and over	.3	.8	.6	1.8	1.9	.2
Langth of comics with smuleyer						
Length of service with employer		40.5	47.4	45.0	4	
Less than 3 months	30.6	13.5	17.4	15.9	15.7	14.1
3 - 11 months	21.7	16.0	22.1	26.3	18.7	19.3
1 - 5 years	31.2	31.0	33.7	29.8	26.7	35.9
More than 5 years	8.7	28.5	17.5	19.5	19.6	23.5
Not reported	7.8	11.1	9.3	8.5	19.3	7.2
Race or ethnic origin						
White, non-Hispanic	57.7	50.4	68.1	47.0	44.4	66.9
Black, non-Hispanic	7.5	8.3	2.1	12.3	6.5	5.1
Hispanic	17.9	9.7	8.2	12.8	7.7	8.4
Asian or Pacific Islander	1.2	1.9	1.1	2.9	1.3	.9
American Indian or Alaskan Native	.5	.4	.5	.9	.3	.4
Not reported	15.2	29.3	20.0	24.1	39.8	18.2
Major industry division						
Agriculture, forestry, and fishing ³	_	_	_	_	_	.3
Mining ⁴	_	(²)	.1	_	.1	1.0
Construction	96.7	1.1	80.1	_	_	6.7
Manufacturing	.2	83.9	7.8	1.1	4.6	78.7
Transportation and public utilities ⁴	.6	.6	.3	.3	.7	2.7
Wholesale trade	.3	6.3	1.8		9.7	4.9
Retail trade		3.1	2.9	68.2	84.2	.5
Finance, insurance, and real estate	.1	_	1.6	.4	_	.7
Services	2.0	4.9	5.2	29.9	.6	4.5
		1.0	0.2	20.0		1.0
Number of days away from work	10.4	17.0	104	15.0	16.0	06.7
1	12.4	17.8	12.1	15.2	16.0	26.7
2	10.7	12.3	13.9	14.8	16.0	14.5
3 - 5	22.3	19.0	16.4	25.6	24.0	18.2
6 - 10	12.7	11.6	13.0	12.2	13.0	11.0
11 - 20	11.5	12.0	12.0	10.3	12.0	9.5
21 - 30	7.2	6.6	9.7	8.6	5.3	6.2
31 or more	23.1	20.7	22.9	13.4	13.8	13.9
Median days away from work	7	6	8	5	5	4

 $\label{thm:thm:thm:cases} \begin{tabular}{ll} TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases, 1 1997 — Continued 1 and 2 are also cases in 10 occupations: Percent distribution of days-away-from-work cases, 1 1997 — Continued 2 and 3 are also cases in 10 occupations: 3 are also cases, 3 are als$

Characteristic	All occu- pations	Truckdrivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Percent of total by characteristic—					
Nature of injury, illness					
Sprains, strains, tears	43.6	54.1	41.7	64.4	44.5
Fractures	6.5	7.0	8.0	2.2	6.3
Cuts, lacerations	8.5	3.9	9.3	1.1	7.4
Amputations	.6	.2	.6	_	.3
Bruises, contusions	9.0	7.9	11.3	7.1	11.4
Heat burns, scalds	1.6	.2	.9	.3	.9
Chemical burns	.7	.3	.9	.5	1.6
Carpal tunnel syndrome	1.6	.3	1.0	.1	.7
Tendonitis	1.0	.2	.8	.4	.6
Multiple traumatic injuries and disorders	3.3	5.6	2.8	1.9	3.4
With fractures and burns	.6	.4	.6	.1	.4
With sprains and bruises	1.2	2.0	1.1	1.1	1.5
Soreness, pain, including back	6.3	6.1	6.2	10.8	6.7
Back pain only	2.7	2.4	2.9	5.1	2.8
All other natures	17.3	14.2	16.6	11.2	16.3
Part of body affected					
Head	6.7	4.5	6.9	3.5	7.2
Eye(s)	3.5	1.4	4.2	1.0	3.5
Neck, including throat	1.7	2.1	1.5	2.0	1.6
Trunk	37.5	43.3	38.1	57.0	40.1
Shoulder, including clavicle, scapula	5.1	7.1	5.5	7.3	5.6
Back, including spine, spinal cord	25.7	28.1	24.7	43.6	27.7
Upper extremities	22.9	12.2	24.2	12.1	21.8
Wrist(s)	5.0	2.8	5.4	4.1	3.6
Hand(s), except finger(s)	4.0	1.8	4.4	1.3	4.4
Finger(s), fingernail(s)	8.4	3.0	8.9	2.5	8.0
Lower extremities	20.5	24.0	22.3	13.7	18.7
Knee(s)	7.1	8.1	6.2	5.9	5.5
Foot, toe	4.9	4.4	7.0	2.1	5.1
Body systems	1.4	1.2	.8	.9	1.8
Multiple body parts	8.2	12.2	5.2	9.9	7.3
All other parts of body	1.1	.6	1.0	.8	1.5
Source of injury, illness					
Chemicals and chemical products	1.8	1.0	1.6	1.0	3.3
Containers	14.6	20.3	23.5	1.6	17.1
Furniture and fixtures	3.5	2.0	3.6	3.5	7.6
Machinery	6.7	2.4	6.2	.9	8.2
Parts and materials	11.3	8.7	15.9	.2	5.8
Bodily motion or position of injured,					
ill worker	15.1	13.9	12.5	9.0	13.8
Floors, walkways, ground surfaces	15.7	18.7	11.0	11.1	19.2
	4.3	1.1	3.7	.2	5.2
10018. IIISTI UTTETILS. AND EDDIOMENT			_		
Tools, instruments, and equipmentVehicles	8.1	24.6	l 8.6	3.6	1 5.0
Vehicles Health care patient	8.1 4.7	24.6 (²)	8.6 .1	3.6 60.0	5.0 —

TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases, 1997 — Continued

Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Stock handlers and baggers	Welders and cutters
Percent of total by characteristic—						
Nature of injury, illness						
Sprains, strains, tears	33.8	38.9	34.2	25.9	49.2	30.7
Fractures	8.9	4.7	11.5	6.8	4.2	6.4
Cuts, lacerations	13.2	11.9	18.1	19.8	8.9	8.3
Amputations		1.2	.3	.5	_	1.8
Bruises, contusions	9.9	7.8	8.2	10.0	13.2	6.9
Heat burns, scalds		.6	.1	17.5		3.7
Chemical burns	.8	.5	.2	.4	.2	T
Carpal tunnel syndrome		5.0	.5	2.0	.6	1.7
Tendonitis	.3	3.0	.5	.4	.8	.6
Multiple traumatic injuries and disorders		3.0	3.4	2.0	2.9	2.2
With sprains and bruises	.8 1.3	1.0 .9	1.3 .8	- 1.5	.2 1.1	.6 .3
With sprains and bruises Soreness, pain, including back	6.4	.9 6.4	.o 4.3	3.3	6.4	4.1
Back pain only	2.9	2.1	1.9	1.3	2.7	1.5
All other natures	20.5	17.1	18.5	11.5	13.4	33.4
Part of body affected						
Head	9.0	7.0	7.7	4.7	4.5	24.8
Eye(s)	5.6	4.3	4.2	1.8	1.1	21.2
Neck, including throat	.9	1.9	2.2	.9	1.2	1.1
Trunk	35.2 4.9	32.0 6.2	33.0 4.5	21.7 1.3	45.3 5.7	29.9 3.8
Shoulder, including clavicle, scapula Back, including spine, spinal cord	21.9	20.1	21.5	17.1	31.0	19.0
Upper extremities	18.8	37.7	23.9	46.0	19.7	22.5
Wrist(s)	3.0	9.9	2.8	8.0	3.9	4.1
Hand(s), except finger(s)	3.2	6.3	4.2	8.4	4.2	3.9
Finger(s), fingernail(s)	8.3	12.8	12.6	18.8	7.4	10.2
Lower extremities	27.4	14.2	26.3	16.7	23.6	16.6
Knee(s)	l	4.6	7.3	5.7	7.4	4.9
Foot, toe	l	4.0	9.6	4.7	8.4	6.1
Body systems		1.1	.8	1.7	.3	.6
Multiple body parts	7.4	5.6	4.9	8.0	4.9	3.5
All other parts of body	.6	.5	1.3	.4	.5	1.0
Source of injury, illness						
Chemicals and chemical products	1.4	1.8	1.0	1.8	.6	.8
Containers	6.3	9.5	3.3	15.4	36.2	5.3
Furniture and fixtures	1.1	3.8	2.5	2.1	4.7	2.4
Machinery	6.2	9.9	4.2	11.2	6.6	8.5
Parts and materials	25.8	20.9	25.3	2.0	3.5	30.6
Bodily motion or position of injured,						
ill worker	11.7	26.0	10.8	10.2	12.5	12.3
Floors, walkways, ground surfaces	14.1	7.0	16.4	22.8	10.5	4.9
Tools, instruments, and equipment	11.3	6.5	9.5	11.8	4.8	12.8
Vehicles	5.8	4.2	5.4	1.5	8.4	2.6
Health care patient	_	_	-	_	_	_
All other sources	16.3	10.4	21.6	21.2	12.2	19.8

 $\label{thm:thm:thm:cases} \begin{tabular}{ll} TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases, 1 1997 — Continued 1 and 2 are also cases in 10 occupations: Percent distribution of days-away-from-work cases, 1 1997 — Continued 2 and 3 are also cases in 10 occupations: 3 are also cases, 3 are als$

Characteristic	All occu- pations	Truckdrivers	Laborers, except construction	Nursing aides, orderlies and attendants	Janitors and cleaners
Percent of total by characteristic—					
Contact with objects and equipment Struck by object Struck against object Caught in or compressed by equipment or objects Fall to lower level Fall to same level Slip, trip, loss of balance—without fall Overexertion Overexertion in lifting Repetitive motion Exposure to harmful substances or environments Transportation incidents Fires and explosions Assaults and violent acts	5.4 10.8 3.1 27.7 16.2 4.1 4.6 4.0 .2 1.5	16.9 8.4 4.5 2.3 8.8 10.3 4.0 30.6 16.9 1.1 1.6 13.6 (²) .8	33.1 15.8 8.0 6.2 4.7 7.3 2.2 31.9 20.4 3.2 3.2 3.4 .1	8.4 4.9 2.4 .9 1.4 10.0 2.1 56.3 31.6 .5	26.8 13.1 7.8 4.3 6.4 14.4 3.0 27.6 16.0 2.1 5.1 2.2 .4
By person(s) By other than person All other events		.6 .2 12.3	.2 .4 10.3	6.6 .2 9.4	.1 - 11.9

TABLE E-1. Selected characteristics of workers and cases in 10 occupations: Percent distribution of days-away-from-work cases,¹ 1997 — Continued

					Т	_
Characteristic	Construction laborers	Assemblers	Carpenters	Cooks	Stock handlers and baggers	Welders and cutters
Percent of total by characteristic—						
Event or exposure						
Contact with objects and equipment	38.5	32.1	41.0	29.9	27.7	39.0
Struck by object	21.6	14.1	23.8	16.0	17.1	19.0
Struck against object	7.1	8.1	10.3	9.2	7.0	6.4
Caught in or compressed by equipment						
or objects	5.9	6.8	2.6	2.5	2.7	4.6
Fall to lower level	7.8	1.5	11.4	3.3	3.0	2.3
Fall to same level	7.8	5.5	6.0	19.3	8.6	4.5
Slip, trip, loss of balance—without fall	3.7	2.8	2.4	4.0	2.5	1.5
Overexertion	23.2	27.1	23.3	13.1	38.0	24.6
Overexertion in lifting	12.9	14.2	15.4	9.1	25.4	14.0
Repetitive motion	1.7	15.5	1.7	2.8	3.0	4.6
Exposure to harmful substances or						
environments	5.0	3.4	1.9	19.4	1.2	13.7
Transportation incidents	3.2	1.8	1.4	.3	2.4	.5
Fires and explosions	.1	.1	_	.7	_	.3
Assaults and violent acts	.2	_	.3	.8	.5	.3
By person(s)	.1	_	.2	.7	.5	_
By other than person		_	_	_	_	.3
All other events	8.9	10.2	10.5	6.5	13.1	8.7

Days-away-from-work cases include those which result in days away from work with or without restricted work activity.
Less than 0.1 percent.

Department of Labor; and by the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

Less than 0.1 percent.
 Excludes farms with fewer than 11 employees.
 Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S.

TABLE E-2. Fatal occupational injuries by occupation and event or exposure, 1998

				Event or e	•		
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions
Total	6,026	43.6	15.9	15.6	11.6	9.5	3.4
Managerial and professional specialty Executive, administrative, and	637	44.4	31.2	6.6	9.1	6.8	1.7
managerial	408	38.7	35.0	8.3	9.6	5.9	2.2
administration	10	50.0	40.0	_	_	_	_
Administrators, protective services	7	-	57.1]	_	_	_
Financial managers	8	50.0	50.0	_	_	_	_
Managers, marketing, advertising, and public relations	7	85.7	50.0		_		
Managers, food serving and lodging	<i>'</i>	65.7	_	_	_	_	_
establishments	56	17.9	69.6	_	_	7.1	_
Managers, properties and real estate	16	25.0	43.8	_	31.2	-	_
organizations, n.e.c.	10	40.0	50.0	_	_	_	_
Managers and administrators, n.e.c.	215	35.3	27.0	14.0	13.0	7.4	3.3
•	62	59.7	25.8	4.8	6.5	7.4	3.3
Management related occupations Accountants and auditors	18	50.0	38.9	I I		_	_
	10		50.0	_	_	_	_
Other financial officers	4	50.0 75.0		_	_	_	_
Business and promotion agents	6		_		_	_	_
Construction inspectors	0	66.7	_	_	_	_	_
Inspectors and compliance officers, except	10	60.0					
construction	10	60.0	24.5	2.5	- 0 2	- 0 2	_
Professional specialty	229	54.6 62.5	24.5 12.5	3.5	8.3 6.2	8.3	_
Engineers, architects, and surveyors	48		_	6.2	6.2 6.5	10.4	_
Engineers	46	63.0	13.0	_	6.5	10.9	_
Civil engineers	9	88.9		_	_	- 00.0	_
Electrical and electronic	9	-	33.3	_	_	33.3	_
Industrial	4	100.0	- 07.5	_	_	_	_
Mathematical and computer scientists	8	62.5	37.5	_	_	_	_
Computer systems analysts and scientists	8	62.5	37.5	_	_	_	_
Natural scientists	10	70.0	-	_	_	_	_
Health diagnosing occupations	14	21.4	42.9	-	-	21.4	_
Physicians	8	37.5		_	_	_	_
Health assessment and treating occupations	17	58.8	23.5	_	_	_	_
Registered nurses	14	64.3	21.4	_	_	_	_
Teachers, postsecondary	11	63.6	_	_	_	_	_
Teachers, except postsecondary	37	67.6	21.6	_	_	_	_
Teachers, elementary school	5	60.0		_	_	_	_
Teachers, secondary schoolSocial, recreation, and religious	8	50.0	50.0	_	_	_	_
workers	23	39.1	43.5	-	-	_	_
Social workers	11	45.5	54.5	-	-	_	_
Clergy	. 7	42.9		-	-	_	_
Lawyers and judges	17	47.1	47.1]	-	_	_
Lawyers	17	47.1	47.1	-	_		_
Writers, artists, entertainers, and athletes	40	45.0	22.5	_	15.0	15.0	_
Photographers	6	100.0	_	_	-	_	_
Artists, performers, and related workers Athletes	8 14	28.6	50.0	_	28.6	- 35.7	_
Technical, sales, and administrative support	678	45.0	41.7	4.0	5.3	2.9	.7
Technicians and related support occupations	168	83.3	7.1	4.2	_	4.2	_
Health technologists and technicians	21	76.2			_		_
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 ${\it TABLE~E-2.} \ \ \textbf{Fatal occupational injuries by occupation and event or exposure, 1998} - Continued$

				Event or e (perc			
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions
Tachnical calca and administrative cunnert							
Technical, sales, and administrative support – continued							
Clinical laboratory technologists and							
technicians	3	100.0	_	_	_	_	_
Engineering and related technologists and							
technicians	29	51.7	24.1	17.2	-	_	_
Electrical and electronic technicians	14	50.0	21.4	_	_	_	_
Technicians, except health, engineering, and science	113	94.7	2.7	_	_	2.7	_
Airplane pilots and navigators	91	100.0		_	_		_
Sales occupations	396	29.3	59.8	3.8	4.5	1.5	1.0
Supervisors and proprietors, sales							
occupations	185	14.6	73.0	5.4	5.4	_	_
Sales representatives, finance and business	24	64.5	05.0				
services Real estate sales occupations	31 6	64.5	25.8 50.0	_	_	_	_
Sales representatives, commodities except	"	_	30.0	_	_		_
retail	24	66.7	20.8	_	_	_	_
Sales representatives, mining,							
manufacturing, and wholesale	24	66.7	20.8	_	_	_	_
Sales workers, retail and personal services	152	33.6	58.6	2.0	4.6	_	_
Sales workers, motor vehicles and boats	20	60.0	40.0	_	_	_	_
Sales counter clerks Cashiers	15 52	_	86.7 88.5	_	_	_	_
Street and door-to-door sales	32	_	00.5	_			_
workers	6	100.0	_	_	_	_	_
News vendors	14	85.7	_	_	-	_	_
Administrative support occupations, including							
clerical	114	43.0	29.8	4.4	14.9	6.1	_
Supervisors, administrative support		50.0					
occupationsSecretaries, stenographers, and typists		50.0	41.7	_	_	_	_
Secretaries	12	_	41.7	_	_		_
Information clerks	13	_	61.5	_	_	_	_
Records processing occupations, except							
financial	7	42.9	_	_	-	_	_
Financial records processing occupations	5		60.0	_	-	_	_
Mail and message distributing occupations	25	72.0	16.0	_	12.0	_	_
Mail carriers, postal service	12 9	83.3 66.7	_		_		_
Material recording, scheduling, and distributing	9	00.7	_	_			_
clerks	22	36.4	22.7	_	27.3	_	_
Traffic, shipping, and receiving							
clerks	10	40.0		-	-	_	_
Miscellaneous administrative support	19	52.6	21.1	_	_	_	_
Service occupations	439	34.2	41.2	3.2	5.9	7.7	7.3
Private household occupations	6	34.2	41.2	J.Z	- -	50.0	
Protective service occupations	257	39.7	42.4	2.3	1.2	5.8	8.2
Firefighting and fire prevention occupations,							
including supervisors	45	40.0	_	_	-	11.1	42.2
Firefighting occupations	43	39.5	_	_	-	11.6	41.9
Police and detectives, including supervisors	137	46.7	47.4	_	_	2.2	_

TABLE E-2. Fatal occupational injuries by occupation and event or exposure, 1998 — Continued

				Event or e	•		
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions
Service occupations – continued							
Police and detectives, public services	86	45.3	52.3	_	_	_	_
Sheriffs, bailiffs, and other law enforcement							
officers	34	55.9	32.4	_	-	_	_
Correctional institution officers	8	37.5	37.5	_	-	_	_
Guards, including supervisors	75 65	26.7	56.0	5.3	_	9.3	_
Guards and police, except public service Service occupations, except protective and	65 176	23.1	61.5 40.3	4.6 4.5	- 13.1	9.2	6.2
household Food preparation and service occupations Supervisors, food preparation and service	50	10.0	62.0	4.5	10.0	12.0	-
occupations	10	30.0	30.0	_	_	_	_
Bartenders	6	_	100.0	_	_	_	_
Waiters and waitresses	8	_	87.5	_	_	_	_
Cooks	13	_	53.8	-	-	_	_
Kitchen workers, food preparation	7	_	71.4	-	_	_	_
Health service occupations	17	52.9	35.3	_	-	_	_
Nursing aides, orderlies, and attendants	15	53.3	33.3	-	-	_	_
Cleaning and building service occupations,	00	00.4	00.4	,	40.0	40.4	101
except household	69	26.1	30.4	4.3	18.8	10.1	10.1
Maids and housemen	5	25.0	60.0 30.4	5.4	_ 17.9	_	12.5
Janitors and cleaners Personal service occupations	56 40	35.0	30.4	7.5	17.9	8.9 7.5	12.5
Barbers	40	35.0	100.0	7.5	10.0	7.5	_
Attendants, amusement and recreation	-		100.0				
facilities	7	42.9	_	_	_	_	_
Guides	11	63.6	_	_	27.3	_	_
Farming, forestry, and fishing	921	48.8	5.5	27.9	6.4	9.8	1.3
Farming operators and managers	370	55.7	4.9	26.2	4.6	7.0	1.4
Farmers, except horticultural	277	54.9	5.1	28.5	4.0	5.8	1.4
Horticultural specialty farmers	11	_	_	27.3	27.3	27.3	_
Managers, farms, except horticultural Other agricultural and related	81	64.2	4.9	17.3	3.7	8.6	_
occupations	361	43.8	8.0	21.9	9.4	15.0	1.7
Farm occupations, except managerial	238	46.2	10.9	23.5	5.9	10.9	2.1
Supervisors, farm workers	16	37.5	_	18.8	-	25.0	
Farm workers	218	47.2	11.5	22.9	6.4	10.1	1.4
Nursery workers Related agricultural occupations	4 123	39.0	2.4	75.0 18.7	_ 16.3	22.8	_
Supervisors, related agricultural	120	33.0	2.4	10.7	10.5	22.0	_
occupations	10	40.0	_	30.0	_	_	_
Groundskeepers and gardeners, except				55.5			
farm	108	38.0	2.8	17.6	17.6	23.1	_
Forestry and logging occupations	118	16.9	3.4	67.8	5.1	5.1	_
Supervisors, forestry, and logging workers	20	_	_	75.0	_	_	_
Forestry workers, except logging	9	44.4	_	-	-	_	_
Timber cutting and logging							
occupations	89	15.7	3.4	71.9	4.5	3.4	_
Fishers, hunters, and trappers	72	90.3	_	-	-	5.6	_
Fishers, including vessel captains and officers	71	90.1	_	_	-	5.6	_
Precision production, craft, and repair	1,084	19.2	6.7	19.4	28.2	20.8	5.4

TABLE E-2. Fatal occupational injuries by occupation and event or exposure, 1998 — Continued

				Event or e			
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions
Precision production, craft, and repair –							
continued							
Mechanics and repairers	285	23.9	9.8	28.1	12.3	17.2	8.8
Supervisors, mechanics and repairers	12	41.7	_	_	-	25.0	_
Mechanics and repairers, except supervisors	273	23.1	9.9	28.6	12.8	16.8	8.8
Vehicle and mobile equipment mechanics,	126	25.0	14.0	20.7	5.9	2.7	11.8
repairers	136 48	25.0 25.0	14.0 22.9	39.7 37.5	5. 9 –	3.7	10.4
Bus, truck, and stationary engine	40	25.0		01.5	_		10.4
mechanics	39	20.5	7.7	46.2	7.7	_	12.8
Automobile body and related repairers	8	_	62.5	_	_	_	_
Heavy equipment mechanics	28	25.0	_	39.3	14.3	_	14.3
Farm equipment mechanics	5	60.0	_	_	-	_	_
Industrial machinery repairers	18	_	_	38.9	-	38.9	_
Electrical and electronic equipment					00.0	00.0	
repairers	41	26.8	9.8	7.3	22.0	29.3	_
Electronic repairers, communications and industrial equipment	24		16.7		20.8	45.8	
Household appliance and power tool	24	_	10.7	_	20.0	45.0	_
repairers	8	87.5	_	_	_	_	_
Telephone line installers and repairers	6	-	_	_	66.7	_	_
Heating, air conditioning, and refrigeration							
mechanics	17	17.6	_	_	17.6	47.1	_
Miscellaneous mechanics and repairers	58	22.4	6.9	20.7	22.4	20.7	6.9
Elevator installers and repairers	5			60.0	_		
Construction trades	631	16.8	3.2	13.5	39.0	25.0	2.4
Supervisors, construction occupations	89	39.3	7.9	12.4	18.0	20.2	_
Supervisors, electricians and power transmission installers	7	_	_	_	_	57.1	_
Supervisors, n.e.c.	73	46.6	4.1	12.3	_ 19.2	15.1	_
Construction trades, except	,,	40.0	7.1	12.0	10.2	10.1	
supervisors	542	13.1	2.4	13.7	42.4	25.8	2.4
Brickmasons, stonemasons, and							
apprentices	13	23.1	_	23.1	46.2	_	_
Carpenters and apprentices	90	5.6	3.3	15.6	63.3	12.2	_
Drywall installers	6		_	-	50.0	_	_
Electricians and apprentices	124	14.5	_	15.3	15.3	51.6	147
Electrical power installers and repairers Painters, construction and maintenance	34 41	14.7 14.6	_	_	20.6 46.3	44.1 22.0	14.7 7.3
Plumbers, pipefitters, steamfitters, and	41	14.0	_	_	40.3	22.0	7.3
apprentices	33	15.2	_	30.3	33.3	12.1	_
Insulation workers	10	50.0	_	-	40.0		_
Paving, surfacing, and tamping equipment							
operators	6	66.7	_	_	-	_	_
Roofers	50	6.0	_	_	78.0	14.0	_
Structural metal workers	52	_	_	9.6	82.7	5.8	_
Drillers, earth	8	-	_	- 45.0	-	62.5	-
Extractive occupations	60	18.3	_	45.0	11.7	8.3	13.3
Supervisors, extractive occupations Drillers, oil wells	9 15	55.6 20.0	_	20.0	_ 20.0	_	26.7
Mining machine operators	20	15.0	_	80.0	ZU.U —	_	20.7
Precision production occupations	108	21.3	22.2	16.7	16.7	13.0	9.3
Precision metal working occupations	33	12.1	24.2	24.2	21.2	18.2	_
	18	16.7	27.8	27.8	22.2	1	1

TABLE E-2. Fatal occupational injuries by occupation and event or exposure, 1998 — Continued

				Event or e	•		
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions
Descricion was described and some							
Precision production, craft, and repair – continued							
Sheet metal workers	10	_	_	_	_	40.0	_
Plant and system operators	13	_	_	_	23.1	23.1	_
Operators, fabricators, and laborers	2,151	54.0	7.4	17.6	9.9	7.0	4.0
Machine operators, assemblers, and inspectors	221	15.8	9.5	35.3	10.4	13.1	15.4
Machine operators and tenders, except	105	110	0.0	45.0	6.7	44.4	44.4
precision Metal working and plastic working machine	135	14.8	9.6	45.9	6.7	11.1	11.1
operators Metal and plastic processing machine	10	_	_	70.0	_	_	_
operators	6	_	_	83.3	_	_	_
Molding and casting machine operators	4	_	_	75.0	_	_	_
Woodworking machine operators	9	_	_	88.9	-	_	_
Sawing machine operators Textile, apparel, and furnishings machine	6	_	_	83.3	_	_	_
operators	8	_	50.0	_	_	_	_
Machine operators, assorted materials	100	18.0	6.0	41.0	7.0	12.0	15.0
Separating, filtering, and clarifying machine	_	60.0					
operators Furnace, kiln, and oven operators except	5	60.0	_	_	_	_	_
food	9	_	_	44.4	-	_	_
Crushing and grinding machine operators	6	_	_	66.7	_	_	_
Slicing and cutting machine operators	8	_	_	37.5	_		37.5
Miscellaneous machine operators, n.e.c	35	17.1	8.6	45.7	_	17.1	-
Machine operators, not specified	22	22.7	_	54.5	-	_	13.6
Fabricators, assemblers, and hand working							
occupations	79	19.0	10.1	16.5	15.2	15.2	24.1
Welders and cutters	65 12	18.5	6.2	16.9	13.8 –	16.9	27.7
Production inspectors, testers, samplers, and	12	_	33.3	_	_	_	_
weighers	7	_	_	42.9	_	_	_
Transportation and material moving occupations	1,257	73.7	7.6	11.0	2.7	3.1	1.8
Motor vehicle operators	1,020	78.2	8.8	7.7	2.3	2.1	.7
Truck drivers	879	82.0	3.4	8.6	2.5	2.4	.8
Driver-sales workers	36	75.0	16.7	-	_	_	_
Bus drivers Taxicab drivers and chauffeurs	13	76.9	61.0	_	_	_	_
Transportation occupations, except motor	82	39.0	61.0	_	_	_	_
vehicles	40	77.5	_	7.5	_	7.5	_
Rail transportation occupations	15	86.7	_		_	_	_
Railroad conductors and yardmasters	4	75.0	_	-	-	_	_
Locomotive operating	_	100.0					
occupations	5	100.0	_	-	-	_	_
operators	5	80.0	_	_	_	_	_
Water transportation occupations	25	72.0	_	_	_	12.0	_
Ship captains and mates, except fishing							
boats	3	100.0	_	-	-	_	_
Sailors and deckhands	18	66.7	_	-	-	16.7	_
Material moving equipment operators	197	49.2	2.5	28.4	5.1	7.6	7.1
Operating engineers	46	58.7	_	23.9	6.5	8.7	_

TABLE E-2. Fatal occupational injuries by occupation and event or exposure, 1998 — Continued

				Event or e					
Occupation ¹	Total fatalities (number)	Transpor- tation incidents ³	Assaults and violent acts ⁴	Contact with objects and equip- ment	Falls	Exposure to harmful sub- stances or environ- ments	Fires and explosions		
Operators, fabricators, and laborers – continued									
Hoist and winch operators	14	_	_	_	_	_	50.0		
Crane and tower operators	12	_	_	50.0	_	_	_		
Excavating and loading machine operators	24	45.8	_	45.8	_	_	_		
Grader, dozer, and scraper									
operators	20	65.0	_	25.0	_	_	_		
Industrial truck and tractor equipment									
operators	46	65.2	_	23.9	8.7	_	_		
Handlers, equipment cleaners, helpers, and									
laborers	673	29.7	6.2	24.1	23.2	12.2	4.5		
Helpers, construction and extractive	40			45.0	40.4	00.0			
occupations	19	_	_	15.8	42.1	26.3	_		
Helpers, construction trades Construction laborers	17 335	30.4	1.2	17.6 22.4	47.1 31.9	29.4 12.5	1.5		
Freight, stock, and material handlers	80	48.8	10.0	18.8	8.8	8.8	5.0		
Garbage collectors	25	76.0	10.0	20.0	0.0	0.0	5.0		
Stevedores	11	70.0	_	20.0			_		
Stock handlers and baggers	10		50.0	_	_	_	_		
Garage and service station related	"		00.0						
occupations	24	25.0	45.8	16.7	_	_	12.5		
Vehicle washers and equipment cleaners	12	33.3	33.3		_	_			
Laborers, except construction	192	24.0	5.7	31.8	16.1	13.0	8.9		
Military occupations ⁵	88	71.6	9.1	11.4	-	6.8	_		

¹ Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

² Based on the 1992 BLS Occupational Injury and Illness

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. There were 28 fatalities for which there was insufficient information to determine a specific occupation classification. Dashes indicate no data reported or data that do not meet publication criteria. n.e.c means "not elsewhere classified." SOURCE: U.S. Department of Labor, Bureau of Labor Statistics,

Census of Fatal Occupational Injuries

Classification Manual.

³ Includes highway, nonhighway, air, water, and rail fatalities.

⁴ Includes violence by persons, self-inflicted injury, and assaults by animals.

⁵ Resident armed forces.

TABLE E-3. Fatal occupational injuries resulting from transportation incidents and homicides by occupation, 1998

Occupation ¹		Transportation incidents (percent)					Homicides (percent)		
	Total fatalities (number)	Total	Highway inci- dents	Non- highway inci- dents	Worker struck by vehicle	All other trans- portation inci- dents	Total	Homi- cides by shooting	All other homi- cides
Total	6,026	43.6	23.7	6.4	6.9	6.7	11.8	9.4	2.3
Managerial and professional specialty Executive, administrative, and	637	44.4	26.8	1.9	5.2	10.5	20.6	14.9	5.7
managerial Administrators and officials, public	408	38.7	24.8	1.7	5.1	7.1	25.0	18.6	6.4
administration	10	50.0	_	_	_	_	40.0	40.0	-
Administrators, protective services	7	-	_	_	_	_	57.1		-
Financial managers Managers, marketing, advertising, and public	8	50.0		_	_	_	50.0	50.0	_
relations	7	85.7	71.4	_	_	_	_	_	-
Managers, food serving and lodging establishments	56	17.9	8.9	_	_	_	64.3	44.6	19.6
Managers, properties and real estate	16	25.0	-	-	_	_	25.0	-	-
organizations, n.e.c.	10	40.0	_	_	_	_	_	_	_
Managers and administrators, n.e.c	215	35.3	19.5	1.9	4.7	9.3	16.3	12.1	4.2
Management related occupations	62	59.7	45.2	_	_	8.1	12.9	12.9	-
Accountants and auditors	18	50.0	27.8	_	_	-	-	_	-
Other financial officers	10	50.0	50.0	_	_	_	_	_	_
Construction inspectors Inspectors and compliance officers, except	6	66.7	66.7	_	_	_	-	_	_
construction	10	60.0	50.0	_	_	_	_	_	_
Professional specialty	229	54.6	30.6	2.2	5.2	16.6	12.7	8.3	4.4
Engineers, architects, and surveyors	48	62.5	35.4		12.5	12.5		_	
Engineers	46	63.0	37.0	_	10.9	13.0	_	_	-
Civil engineers	9	88.9	44.4	_	_	_	-	_	-
Industrial	4	100.0		_	_	_	-	_	-
Mathematical and computer scientists	8	62.5	50.0	_	_	_	-	_	_
Computer systems analysts and scientists	8	62.5	50.0	_	_	_	_	_	_
Natural scientists Health assessment and treating occupations	10 17	70.0 58.8	41.2	_	_	_	_	_	_
Registered nurses	14	64.3	42.9	_	_	_	_	_	-
Teachers, postsecondary	11	63.6	54.5	_	_	_	_	_	_
Teachers, except postsecondary	37	67.6	29.7	_	_	35.1	16.2	16.2	_
Teachers, secondary school	8	50.0	_	_	_	_	_	_	-
Social, recreation, and religious									
workers	23	39.1	26.1	_	_	-	39.1	_	26.1
Social workers	11	45.5	36.4	_	_	- 00.4	45.5	_	_
Lawyers and judges	17	47.1	_	_	_	29.4	_	_	_
Lawyers Writers, artists, entertainers, and athletes	17 40	47.1 45.0	20.0	_	_	29.4 12.5	_ 10.0	_	_
Photographers	6	100.0	20.0	_	_	12.5	10.0	_	-
Athletes	14	28.6	_	_	_	_	_	_	_
	_						_		
Technical, sales, and administrative support Technicians and related support occupations	678 168	45.0 83.3	24.5 20.2	_	3.5 4.2	16.5 58.9	35.3 3.0	28.5	6.8
Health technologists and technicians	21	76.2	52.4	_	-	23.8	-	-	-
Engineering and related technologists and technicians	29	51.7	24.1	_	20.7	_	_	_	_
Electrical and electronic technicians	14	50.0	42.9	_	_	_	-	_	-
Technicians, except health, engineering, and science	113	94.7	12.4	_	_	81.4	_	_	_
Airplane pilots and navigators	91	100.0		_	_	97.8	_	_	-
Sales occupations	396	29.3	23.5	_	3.0	2.5	52.0	42.7	9.3
Supervisors and proprietors, sales									
occupations	185	14.6	11.4	_	_	_	63.2	54.1	9.2

 ${\sf TABLE~E-3.} \ \ \textbf{Fatal occupational injuries resulting from transportation incidents and homicides by occupation, 1998} - Continued$

Technical, sales, and administrative support - continued Sales representatives, finance and business sortices Sales representatives, mining, manufacturing, and wholesale 24 66.7 62.5 - - - 19.4 16.1 - Sales representatives, commodities except 24 66.7 62.5 - - - - - - - - -	Occupation ¹		Transportation incidents (percent)					Homicides (percent)		
continued Sales representatives, finance and business services 31 64.5 61.3 - - - 19.4 16.1 - Sales representatives, commodities except retail 24 66.7 62.5 - <		fatalities	Total	inci-	highway inci-	struck by	trans- portation inci-	Total	cides by	All other homi- cides
continued Sales representatives, finance and business services 31 64.5 61.3 - - - 19.4 16.1 - Sales representatives, commodities except retail 24 66.7 62.5 - <										
Sales representatives, finance and business services Sales representatives, commodities except retail 24 66.7 62.5 - - - - - - - - -										
Services										
Sales representatives, commodities except retail 24 66.7 62.5 - - - - - - - - -		21	64.5	61.2				10.4	16.1	
retail		31	04.5	01.3	_	_	_	19.4	10.1	_
Sales representatives, mining, manufacturing, and wholesele	·	24	66.7	62.5	_	_	_	_	_	_
manufacturing, and wholesale			"	02.0						
Sales workers, relail and personal services 152 33.6 24.3 - 4.6 3.9 52.6 40.8 11 Sales counter clerks 15 - - - - 80.0 53.3 26 Cashiers 52 - - - - 86.5 71.2 15 Cashiers 52 - - - - - 86.5 71.2 15 Cashiers 52 - <		24	66.7	62.5	_	_	_	_	_	_
Sales workers, motor vehicles and boats 20 60.0 45.0 - - 30.0 25.0 - Sales counter clerks 55 - - - - - 80.0 53.3 26 Cashiers 55 - - - - - 86.5 71.2 15 Street and door-to-door sales 6 100.0 - <t< td=""><td></td><td>152</td><td>33.6</td><td>24.3</td><td>_</td><td>4.6</td><td>3.9</td><td>52.6</td><td>40.8</td><td>11.8</td></t<>		152	33.6	24.3	_	4.6	3.9	52.6	40.8	11.8
Street and door-to-door sales workers			60.0	45.0	_	_	_	30.0	25.0	_
Street and door-to-door sales workers workers 6 100.0 - - - - - - - - -	Sales counter clerks	15	_	-	-	_	_	80.0	53.3	26.7
workers 6 100.0 - <th< td=""><td></td><td>52</td><td>_</td><td>-</td><td> -</td><td>_</td><td>_</td><td>86.5</td><td>71.2</td><td>15.4</td></th<>		52	_	-	-	_	_	86.5	71.2	15.4
News vendors										
Administrative support occupations, including clerical serical serical serical serior stemporaphers, and typists 12			l		-	_	_	_	_	-
Clerical		14	85.7	78.6	-	_	_	_	_	-
Secretaries, stenographers, and typists 12		114	40.0	24.0		4.4		04.6	10.0	F 2
Secretaries					_				1	5.3
Information clerks										-
Mail and message distributing occupations 25 72.0 72.0 -									1	[
Mail carriers, postal service 12 83.3 83.3 -			l	1		_				_
Messengers 9 66.7 66.7 -			l	1	_	_	_	_	_	_
Material recording, scheduling, and distributing clerks 22 36.4 - - - - 18.2 - <td></td> <td></td> <td>l</td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>			l		_	_	_	_	_	_
Clerks										
Clerks		22	36.4	_	_	_	_	18.2	_	_
Miscellaneous administrative support 19 52.6 42.1 - - - 21.1 21.1 - Service occupations 439 34.2 21.6 1.1 8.2 3.2 33.0 28.0 5 Protective service occupations 257 39.7 24.9 - 11.3 2.7 35.4 31.9 3 Firefighting and fire prevention occupations, including supervisors 45 40.0 17.8 - 13.3 -	Traffic, shipping, and receiving									
Service occupations		-		-	-	_	_	_	_	-
Protective service occupations 257 39.7 24.9 - 11.3 2.7 35.4 31.9 3	Miscellaneous administrative support	19	52.6	42.1	_	_	_	21.1	21.1	_
Protective service occupations	Service occupations	439	34.2	21.6	1.1	8.2	3.2	33.0	28.0	5.0
Firefighting and fire prevention occupations, including supervisors			l		1				1	3.5
including supervisors	Firefighting and fire prevention occupations,									
Police and detectives, including supervisors	including supervisors	45		17.8	-	13.3	_	_	_	-
Police and detectives, public Services 86 45.3 30.2 - 11.6 - 47.7 47.7 - Sheriffs, bailiffs, and other law enforcement officers 34 55.9 47.1 - - - 20.6 20.6 -	Firefighting occupations		l	1	-			_	_	-
services 86 45.3 30.2 - 11.6 - 47.7 47.7 - Sheriffs, bailiffs, and other law enforcement officers 34 55.9 47.1 - - 20.6 20.6 - Guards, including supervisors 75 26.7 12.0 - 13.3 - 52.0 41.3 10 Service occupations, except prublic service 65 23.1 10.8 - 12.3 - 56.9 46.2 10 Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - 87.5 62.5 - Cooks 13		137	46.7	34.3	-	9.5	2.9	38.0	37.2	-
Sheriffs, bailiffs, and other law enforcement officers 34 55.9 47.1 - - 20.6 20.6 - Guards, including supervisors 75 26.7 12.0 - 13.3 - 52.0 41.3 10 Guards and police, except public service 65 23.1 10.8 - 12.3 - 56.9 46.2 10 Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - - 56.0 40.0 16 Bartenders 8 - - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - 87.5 62.5 - Cooks </td <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td>45.0</td> <td>00.0</td> <td></td> <td>44.0</td> <td></td> <td>47.7</td> <td>47.7</td> <td></td>	· · · · · · · · · · · · · · · · · · ·		45.0	00.0		44.0		47.7	47.7	
officers 34 55.9 47.1 - - - 20.6 20.6 - Guards, including supervisors 75 26.7 12.0 - 13.3 - 52.0 41.3 10 Guards and police, except public service 65 23.1 10.8 - 12.3 - 56.9 46.2 10 Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - - 56.0 40.0 16 Bartenders 6 - - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - 87.5 62.5 - Cooks 13	00.1.000	86	45.3	30.2	_	11.6	-	47./	47./	-
Guards, including supervisors 75 26.7 12.0 - 13.3 - 52.0 41.3 10 Guards and police, except public service 65 23.1 10.8 - 12.3 - 56.9 46.2 10 Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - - 56.0 40.0 16 Bartenders 6 - - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - 87.5 62.5 - Cooks 13 - - - - 87.5 62.5 - Kitchen workers, food preparation 7 - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - - 8.9 -		24	55.0	171	_			20.6	20.6	
Guards and police, except public service 65 23.1 10.8 - 12.3 - 56.9 46.2 10 Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - - 56.0 40.0 16 Bartenders 6 - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - 87.5 62.5 - Cooks 13 - - - - - 87.5 62.5 - Kitchen workers, food preparation 7 - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - - 8.9 -			l	1	_		_		1	10.7
Service occupations, except protective and household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - - 87.5 62.5 - Cooks 13 - - - - - 46.2 30.8 - Kitchen workers, food preparation 7 - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Except household 69 26.1			l	1					1	10.7
household 176 26.1 17.0 - 4.0 4.0 30.1 22.7 7 Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - - 87.5 62.5 - Cooks 13 - - - - - - 46.2 30.8 - Kitchen workers, food preparation 7 - - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Except household 69 26			20.1	10.0		12.0		00.0	70.2	10.0
Food preparation and service occupations 50 10.0 - - - - 56.0 40.0 16 Bartenders 6 - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - - 87.5 62.5 - Cooks 13 - - - - - - 46.2 30.8 - Kitchen workers, food preparation 7 - - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - 8.9 - - Personal service occupations		176	26.1	17.0	_	4.0	4.0	30.1	22.7	7.4
Bartenders 6 - - - - - 83.3 66.7 - Waiters and waitresses 8 - - - - - 87.5 62.5 - Cooks 13 - - - - - 46.2 30.8 - Kitchen workers, food preparation 7 - - - - 71.4 71.4 - Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - 11.6 5.8 5 Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 100.0 100.0 -			l	-	-	-	-		1	16.0
Cooks 13 - - - - 46.2 30.8 - Kitchen workers, food preparation 7 - - - - 71.4 71.4 - - 71.4 71.4 - - 71.4 71.4 - - 71.4 71.4 - - - 71.4 71.4 - - - 71.4 71.4 - - - 71.4 71.4 - - - 71.4 71.4 - - - - 35.3 29.4 - - - 35.3 29.4 - - - 35.3 29.4 - - - 33.3 26.7 - - - 33.3 26.7 - - - 33.3 26.7 - - - 11.6 5.8 5 5 35.8 5 5 25.0 19.6 - - - - 8.9 - - - - 8.9 - - - - 8.9 - -	Bartenders		-	-	-	-	-	83.3	66.7	-
Kitchen workers, food preparation 7 - - - - - 71.4 71.4 - - - 71.4 71.4 - <td< td=""><td></td><td></td><td> -</td><td> -</td><td> -</td><td> -</td><td> -</td><td></td><td>1</td><td> -</td></td<>			-	-	-	-	-		1	-
Health service occupations 17 52.9 47.1 - - - 35.3 29.4 - Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - 33.3 26.7 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - 11.6 5.8 5 Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -			-	-	-	-	-		1	-
Nursing aides, orderlies, and attendants 15 53.3 46.7 - - - - 33.3 26.7 - Cleaning and building service occupations, except household 69 26.1 21.7 - - - 11.6 5.8 5 Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -	· · ·				-				1	-
Cleaning and building service occupations, except household 69 26.1 21.7 - - - 11.6 5.8 5 Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -			l	1	-				1	-
except household 69 26.1 21.7 - - - 11.6 5.8 5 Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -		15	53.3	46.7	_	_	_	33.3	26.7	-
Janitors and cleaners 56 25.0 19.6 - - - 8.9 - - Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -			00.4	017				110		
Personal service occupations 40 35.0 12.5 - - 17.5 27.5 27.5 - Barbers 4 - - - - - 100.0 100.0 -	·		l	1	_				5.8	5.8
Barbers			l						27.5	_
				12.5	<u>-</u>		17.5			_
Guides			63.6	_	_		54.5			_

TABLE E-3. Fatal occupational injuries resulting from transportation incidents and homicides by occupation, 1998 — Continued

Occupation ¹		Transportation incidents (percent)					Homicides (percent)		
	Total fatalities (number)	Total	Highway inci- dents	Non- highway inci- dents	Worker struck by vehicle	All other trans- portation inci- dents	Total	Homi- cides by shooting	All other homi- cides
Forming foractry and fishing	001	40.0	11.0	24.0	E G	7.0	0.1	2.0	
Farming, forestry, and fishing Farming operators and managers	921 370	48.8 55.7	11.0 10.8	24.9 39.2	5.6 5.4	7.3	2.1 1.6	2.0	
Farmers, except horticultural	277	54.9	9.4	40.1	5.4	_	1.4	1.4	
Managers, farms, except horticultural	81	64.2	17.3	40.7	6.2		- 1.4	1.4	
Other agricultural and related	01	04.2	17.0	40.7	0.2				
occupations	361	43.8	15.8	20.2	7.5	_	3.3	3.0	_
Farm occupations, except managerial	238	46.2	14.7	23.5	8.0	_	4.6	4.2	_
Supervisors, farm workers	16	37.5	_	25.0		_	_	_	_
Farm workers	218	47.2	16.1	23.4	7.8	_	4.6	4.1	_
Related agricultural occupations	123	39.0	17.9	13.8	6.5	_	_	_	_
Supervisors, related agricultural									
occupations	10	40.0	-	_	_	-	_	_	_
Groundskeepers and gardeners, except									
farm	108	38.0	14.8	15.7	6.5	-	-	_	-
Forestry and logging occupations	118	16.9	3.4	9.3	4.2	-	-	_	-
Forestry workers, except logging	9	44.4	-	-	_	-	-	_	_
Timber cutting and logging									
occupations	89	15.7	_	9.0	5.6	-	-	_	-
Fishers, hunters, and trappers	72	90.3	-	_	_	90.3	_	_	_
Fishers, including vessel captains and officers	71	90.1	_	_	_	90.1	_	_	_
Precision production, craft, and repair	1,084	19.2	10.2	2.0	5.4	1.5	3.8	2.6	1.2
Mechanics and repairers	285	23.9	13.0	2.5	5.6	2.8	6.0	3.9	2.1
Supervisors, mechanics and repairers	12	41.7	_	_	_		_	_	
Mechanics and repairers, except supervisors	273	23.1	12.5	2.2	5.5	2.9	5.9	3.7	2.2
Vehicle and mobile equipment mechanics,									
repairers	136	25.0	8.1	3.7	9.6	3.7	5.9	4.4	_
Automobile mechanics and apprentices	48	25.0	12.5	_	10.4	-	8.3	_	_
Bus, truck, and stationary engine									
mechanics	39	20.5	_	_	15.4	-	-	_	_
Heavy equipment mechanics Electrical and electronic equipment	28	25.0	_	_	_	_	-	_	_
repairers	41	26.8	22.0	_	_	_	9.8	_	_
Electronic repairers, communications and	41	20.0	22.0			_	3.0	_	_
industrial equipment	24	_	_	_	_	_	16.7	_	_
Household appliance and power tool							10.7		
repairers	8	87.5	75.0	_	_	_	_	_	_
Miscellaneous mechanics and repairers	58	22.4	19.0	_	_	_	6.9	_	_
Construction trades	631	16.8	8.7	1.6	5.5	1.0	1.3	1.0	_
Supervisors, construction occupations	89	39.3	15.7	_	18.0	-	4.5	4.5	_
Supervisors, n.e.c.	73	46.6	19.2	_	20.5	-	-	_	_
Construction trades, except									
supervisors	542	13.1	7.6	1.3	3.5	.7	.7	_	_
Carpenters and apprentices	90	5.6	4.4	_		-	-	_	-
Electricians and apprentices	124	14.5	7.3	_	4.8	-	_	_	-
Electrical power installers and repairers Painters, construction and maintenance	34 41	14.7 14.6	14.6	_	_	_	-	_	_
Plumbers, pipefitters, steamfitters, and	41	14.0	14.0	_	_	_	_	_	_
apprentices	33	15.2	-	_	_	_	_	_	_
Insulation workers	10	50.0	40.0	_	_	_	_	_	-
Paving, surfacing, and tamping equipment									
operators	6	66.7	-	_	66.7	-	-	_	_
Extractive occupations	60	18.3	8.3	6.7	_	-	-	_	-
Supervisors, extractive occupations	9	55.6		_	_	-	_		-
Precision production occupations	108	21.3	13.0	_	6.5	-	13.9	9.3	4.6
Precision metal working occupations	33	12.1	12.1	_	_	-	_	_	-

TABLE E-3. Fatal occupational injuries resulting from transportation incidents and homicides by occupation, 1998 — Continued

		Transportation incidents (percent)					Homicides (percent)			
Occupation ¹	Occupation ¹ Total fatalities (number) Total	Total	Highway inci- dents	Non- highway inci- dents	Worker struck by vehicle	All other trans- portation inci- dents	Total	Homi- cides by shooting	All other homi- cides	
Operators, fabricators, and laborers Machine operators, assemblers, and inspectors	2,151 221	54.0 15.8	35.9 5.4	4.9 1.8	9.6 5.0	3.5 3.6	6.0 6.3	5.0 5.4	0.9 -	
Machine operators and tenders, except	135	14.8	1 1	_	5.2	3.7	5.2	4.4		
precision	100	18.0	4.4 5.0	_	6.0	5.0	4.0	4.4	_	
Machine operators, assorted materials Miscellaneous machine operators, n.e.c	35	17.1	3.0	_	0.0	5.0	4.0	_	_	
Machine operators, not specified	22	22.7	_	_	_		_	_	_	
Fabricators, assemblers, and hand working	22	22.1	_	_	_	_	_	_	_	
occupations	79	19.0	7.6	_	5.1	_	8.9	7.6	_	
Welders and cutters	65	18.5	6.2	_	6.2	_	6.2	6.2	_	
Transportation and material moving occupations	1,257	73.7	55.2	6.4	7.4	4.7	6.6	5.6	1.0	
Motor vehicle operators	1,020	78.2	66.3	2.5	6.6	2.8	7.7	6.7	1.1	
Truck drivers	879	82.0	69.3	2.4	7.3	3.1	2.5	2.3		
Driver-sales workers	36	75.0	63.9				13.9	13.9	_	
Bus drivers	13	76.9	61.5	_	_	_	_	_	_	
Taxicab drivers and chauffeurs	82	39.0	37.8	_	_	_	59.8	48.8	11.0	
Transportation occupations, except motor	0_	55.5	07.0				00.0	10.0		
vehicles	40	77.5	_	_	12.5	65.0	_	_	_	
Rail transportation occupations	15	86.7	_	_	26.7	60.0	_	_	_	
Locomotive operating										
occupations	5	100.0	_	_	_	80.0	_	_	_	
Railroad brake, signal, and switch										
operators	5	80.0	-	_	_	_	_	_	_	
Water transportation occupations	25	72.0	_	_	_	68.0	_	_	_	
Sailors and deckhands	18	66.7	-	_	_	66.7	-	_	_	
Material moving equipment operators	197	49.2	9.1	27.4	10.7	2.0	-	_	_	
Operating engineers	46	58.7	21.7	15.2	19.6	-	-	_	_	
Excavating and loading machine operators Grader, dozer, and scraper	24	45.8	_	25.0	_	_	-	_	_	
operatorsIndustrial truck and tractor equipment	20	65.0	_	45.0	_	-	-	_	_	
operators	46	65.2	-	56.5	_	-	_	_	-	
Handlers, equipment cleaners, helpers, and										
laborers	673	29.7	10.0	3.1	15.3	1.3	4.6	3.9	.7	
Construction laborers	335	30.4	10.7	2.4	17.3	-	-	_	-	
Freight, stock, and material handlers	80	48.8	12.5	-	28.8	-	7.5	5.0	-	
Garbage collectors	25	76.0	24.0	_	48.0	-	-	_	-	
Stevedores	11	72.7	-	-	36.4	-	_	_	-	
Stock handlers and baggers	10	_	_	_	_	-	40.0	_	_	
Garage and service station related		05.0			05.0		45.0	4		
occupations	24	25.0	_	_	25.0	-	45.8	41.7	_	
Vehicle washers and equipment cleaners	12	33.3			- 7.0		-	-	_	
Laborers, except construction	192	24.0	8.9	4.7	7.8	2.6	4.2	3.1	_	
Military occupations ²	88	71.6	12.5	8.0	_	50.0	-	_	-	

¹ Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

² Resident armed forces.

NOTE: Totals for major categories may include subcategories not shown separately. Percentages may not add to totals because of rounding. There were 28 fatalities for which there was insufficient

information to determine a specific occupation classification. Dashes indicate no data reported or data that do not meet publication criteria. n.e.c means "not elsewhere classified."

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries